The impact of entrepreneurial education and competitiveness on business performance of Indonesian SMEs: Moderating role of self-efficacy

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Abstract
The prime concern of the present study is the investigation of the link between effective entrepreneurial education and competitiveness that influence the business performance of Indonesian SMEs. The study was conducted to determine the empirical examination between constructs through utilization of PLS. The results of the study found that entrepreneurial education and competitiveness significantly and positively influence the business performance, but moderation role of self-efficacy was not observed between constructs. Therefore, H1 and H2, which were the direct hypotheses were accepted statistically but moderating hypotheses H3 and H4 were rejected on statistical grounds. The study provides guidelines for SMEs to initiate entrepreneurial activities for business performance. However, it is observed that various limitations are also attached with the present study. For example, this study is limited in terms of some qualitative analysis where the interview session with the respondents would be quite meaningful. In addition, this study missed the implication on some bigger business firms or large industries as it is only addressing the SMEs firms that are working in the region of Indonesia. Future studies are highly recommended to focus on these limitations.

Keyword: Entrepreneurial Education; Competitiveness; Self-Efficacy; Business Performance
1. Introduction

The organizational performance is one of the topics in management literature that have been addressed by research scholars (Al Hashimi, Mahdi, Al Muwali, & Zaki, 2019). Research scholars have defined organizational performance as assessment and evaluation of firms towards its creativity to deliver value for stakeholders (Dalle et al., 2020; Suriansyah et al., 2019). Organizational performance is influenced by various factors including structural factors, managerial factors and cultural factors. Research scholars have linked entrepreneurship with organizational performance aspect. Entrepreneurship is defined by various scholars who expressed the challenge of lack of theoretical aspect, discipline and an ambiguous unit. Entrepreneurship has been defined in various disciplines which has causes lack of consensus for a single definition (Chena et al., 2020; Combita Mora, 2020; Antelm-Lanzat et al., 2020; Caliskan & Zhu, 2020; Chipeta et al., 2020; De Klerk, 2020). Initially, entrepreneurship was defined and elaborated according to five categories including psychological trait, success strategies, and formation of new ventures and effect of environmental factors (Nayyar, 2012). Entrepreneurship has been expressed at both individual and organizational level and found to be a vital feature towards entrepreneurial concepts. The different aspects of entrepreneurship have its own concepts that are being utilized in its own perspective. Scholars have defined individual lens as economic function of entrepreneurship to initiate or setup new businesses through which an individual innovates products, service or the ways by which an individual discovers or fulfils the need of a specific market (Matthews & Mokoena, 2020; Mosala & Chinomona, 2020; Makhalima, 2020; Meyer & Hassan, 2020; De Bruyn, 2020; Dunga, 2020; Janssen, 2020; Yun, 2020).

1.1 Effective Entrepreneurship Education and Organizational Performance

Research scholars have categorized processes of learning entrepreneurship under three categories including aim to become an entrepreneurial person with anticipation of developing attitude and intention to become entrepreneur; secondly, acquiring the skills and knowledge to become focused for technical or professional aspect of entrepreneurship; and third category is about learning about purpose of academician to focus on research (Nayyar, 2012). The purpose of acquiring entrepreneurial knowledge, skills and abilities must be focused on individuals so that entrepreneurial activities are considered and not to overlooked. Research scholars have argued that entrepreneurial courses positively influence the self-employment intentions and improve the performance of firms through innovation and creativity (Dohse & Walter, 2010). Previous studies have found three reasons considered as antecedents of entrepreneurial activities. The entrepreneurial classes and learning techniques for gathering ideas to initiate businesses through innovations and creativity of worthy ideas that are influenced by entrepreneurial education. Entrepreneurial education offers students the ability to improve and develop innovative business ideas to grab opportunities. Entrepreneurship education assists firms and individual to receive higher rate of return through effective and successful business ventures. Previous studies have revealed that entrepreneurship in less developed nations is characterized by lesser female participants in terms of conducting businesses. The study also argued that entrepreneurially educated individuals in developing countries and in developed countries are similar.

In United States entrepreneurship field of study emerged during 80s and contributed in business activities through effective education and courses at degree level (Iacobucci & Micozzi, 2012). Later, various European countries adopted a similar approach to initiate entrepreneurial activities to gain competitive edge. On the other hand, studies have argued that entrepreneurial education assist to acquire skills at higher education sector that positively influence the individual’s performance. Similarly, studies have been
conducted to examine the link between education and intention of students to initiate their own businesses and found positive relations (Basu & Virick, 2008). The absence of entrepreneurial education impacts the business activities that less number of individuals attract towards setting up their own businesses (Franke & Lüthje, 2004). Similarly, Fatoki (2014) identified that entrepreneurial education and training instigate the intention of individuals to initiate their own businesses that boost the economic activity.

It has been established that less education related to entrepreneurship, lose structure of firms, lack of effective communication and informal networks contribute to reduced business activities and causes loss to firms. It has been recommended by various studies that firms need to focus on creation and innovation to avail opportunities and to become entrepreneurs. Based the on above statements, the following direct hypothesis is derived:

**H1: Effective Entrepreneurial Education Significantly Influences the Business Performance among Indonesian Entrepreneurs**

### 1.2 Competitiveness and Organizational Performance

Research scholars have separated competitiveness into 12 different pillars and divided them into three groups including basic requirements, institutions, infrastructure, stability and elementary education considered as first category. The second category includes factors and resources for efficiency, higher education, product efficiency, market efficiency, financial development, technology development and complexity of businesses. The third category includes innovation and creativity aspect of business (Khyareh & Rostami, 2018). Entrepreneurship has been defined as business setup and start-up for developing innovative business ideas, changes in business operations and processes, economic situations, legal and social aspect and availing opportunities available in market competition at micro levels to gain competitive edge (Khyareh & Rostami, 2018).

In the view of research scholars, entrepreneurship must contribute to economic situation and must emphasize its presence in business related environment and competitive position. Promotion of entrepreneurial activities is highlighted as an essential component in the improvement of businesses processes to gain a competitive edge and to operate in a competitive environment (Cuckovic & Bartlett, 2007). On the other hand, studies have suggested that entrepreneurial dynamics are found to be influential in terms of decreasing competition and contribution towards economic growth in the region. It has been considered in various studies that developing countries must focus on entrepreneurial activities to gain better competitive position and production structure (Amorós & Cristi, 2008). The studies have argued that impact of competitiveness on entrepreneurship leads to better organizational performance and also instigates economic development (Khyareh & Rostami, 2018). The above stated discussion leads towards following hypothesis:

**H2: Competitiveness significantly Influences Business Performance among Indonesian Entrepreneurs**

### 1.3 Moderating Role of Self-Efficacy

Goal setting theory argues on goal commitment and performance as influenced by self-efficacy that plays an important role in business scenario (Karaca, 2020). Self-efficacy, is considered as a belief that one can successfully execute or meet their goals. It has become one of the important concepts for explicating the changes instigated by innovation and creative ideas, to become an entrepreneur, and decisions to follow
or convert intentions into actions or behaviors (Baba, 2014). The term self-efficacy emerged in previous studies and in the theory of social learning. The concepts denotes an individuals’ belief towards his/her abilities and capacity for execution of particular tasks. However, individuals possess their self-beliefs associated with their competencies and abilities in carrying out specific tasks that are connected to self-efficacy. The feelings of an individual and their intention towards cognitive abilities, physical abilities and emotional resources to execute particular tasks depends on self-efficacy (Al Hashimi et al., 2019). Research scholars have defined self-efficacy as beliefs that lead towards intention to perform tasks and consider entrepreneurial behavior as well as perseverance (Owoseni, 2014).

Entrepreneurial self-efficacy has become a significant concept of realization and is associated with successful entrepreneurs, who are equipped with skills, abilities and competencies (Drnovšek, Wincent, & Cardon, 2010). Various research scholars expressed the influence of entrepreneurial self-efficacy for business start-ups and introduce newly innovative processes for business growth (Segal, Borgia, & Schoenfeld, 2005). Various scholars have viewed entrepreneurial self-efficacy as a concept that helps entrepreneurs in managing precariousness and hurdles in the process of entrepreneurship. This indicates that a self-efficacy has a potential and anyone who has possess it are capable of engaging in entrepreneurial activities (Pihie & Bagheri, 2013). There is lack of studies on empirical evidence of self-efficacy and business performance. The present study intends to investigate moderating effect of self-efficacy between effective entrepreneurship education and competitiveness towards business performance.

H3: Self-Efficacy moderates the relationship between Entrepreneurial Education and Business Performance among Indonesian Entrepreneurs

H4: Self-Efficacy moderates the relationship between Competitiveness and Business Performance among Indonesian Entrepreneurs

1.4 Objective of the study

Entrepreneurship influences the understanding of business ventures and improvement in performance of businesses by innovation and creative activities. Research scholars have suggested that organizational level entrepreneurship leads to enhanced performance, including objective measures obtained from organizational records and subjective measures that are obtained from organizational stakeholders. The empirical research examines the link between entrepreneurship and performance but there is lack of studies that determine the entrepreneurship education and competitiveness to influence the organizational performance with moderation effect of self-efficacy.

The phenomenon of entrepreneurship has been expressed in context of entrepreneur’s relationship with organization or firms to meet goals, role in development of firms, management growth and transition (Yalap, Yılmaz & Polatç, 2020). It has been observed that entrepreneurial progression plays a significant role in strategic growth in any business or corporate entity (Umran, Mahmood, & Ahmed, 2016). Southeast Asian economies are found to be active in entrepreneurial activities in society that enhance business activities and contribute to national financial outcomes. The government strives to enhance business activities and entrepreneurial activities to help their nations in boosting their economy in turbulent financial conditions. Public sector heavily invests financially and non-financially in facilitating the government to boost businesses and economic activity to generate entrepreneurs. It has been observed and established that public authorities have a significant impact in supporting the operational
effectiveness and achievements of businesses through appropriate work and meeting of performance expectations (Maldonado & Pinho, 2020). Previous research scholars have depicted that organizations benefit from their capacity and intention to take risks and adoption of newer ideas and technology in the implementation of business process that seek to introduce innovativeness for gaining competitive advantage. Various studies have reported significant entrepreneurial prospects as organizations strive to boost their performance through operational settings by introducing innovation and creativity (Khalid, Ahmed, Tundikbayeva, & Ahmed, 2019; Umrani et al., 2016).

The entrepreneurs take risks in investing their resources to be market oriented and to capitalize on available opportunities (Yavas Celik & Yavuz, 2020). The research scholars have described entrepreneurship in literature in different aspects. It has been defined initially as a rational decision maker, a planner and problem solver, one of important agent towards economic development, innovator by creating new products or services, a manager an industrial leader and an arbitrager for creation of incremental innovations (Nayyar, 2012; Dubrovin & Serova, 2020; Fernandes et al., 2020). Entrepreneurship education can be referred to as training given to an individual to enhance the skills, knowledge and ability to initiate businesses and to become an entrepreneur. Entrepreneurial education can also be considered as skills and knowledge developed for an individual for specific time period to equip them with managerial skills (Ekpe & Mat, 2012). Education related to entrepreneurship provides training to help participants for development of entrepreneurial attributes that support them to initiate successful businesses and ventures. Therefore, it is believed that entrepreneurial education goes beyond guidance to setup business and run ventures, inspired by creativity, critical thinking and advancing sense of self-worth and accountability (Fatoki, 2014). There are several views related to entrepreneurial education. It has been expressed in literature that teaching entrepreneurship relates to different concepts. The prime concern of entrepreneurship education comes under three categories including learning purpose to acquire knowledge (Baharuddin & Dalle, 2017), learning for objective for acting or behavior of entrepreneur and finally learning for purpose of becoming entrepreneur (Dehghanpour Farashah, 2013).

Competitiveness is considered as a focal point for policy since decades due to its importance in business world in highly competitive environment. Literature has expressed factors that influence competitiveness under theoretical support including technology advances in production for strengthening efficient human resources to gain continuous competitive advantages. The competitiveness has become important in competitive environment as it influences the economic growth in developing countries by adopting entrepreneurial business setup. In fact, the productivity level of firms indicate higher rate of return as competitiveness influence growth in economy by initiating entrepreneurial activities (Khyareh & Rostami, 2018).

The current research study intends to examine the influence of effective entrepreneurship education and competitiveness on organizational performance in Indonesia. The study also intends to determine the moderating role of self-efficacy between the relationship of entrepreneurial education and competitiveness towards organizational performance. The study contributes to the body of knowledge by explaining the relationship and impact of entrepreneurship education and competitiveness on organizational performance.

2. Research Methodology

The current section of the study entails the research methodology which is quantitative in nature. The study was conducted on entrepreneurial businesses of Indonesia. The questionnaires were sent through email to business managers of Indonesian SMEs for data collection to analyse the proposed framework. The questionnaires were sent to 300 SMEs and 157 useable responses were received from SMEs of Indonesia. The unit of analysis for the study was the organization. The measurement scales for constructs were adopted from previous studies.

2.1 Analysis

The collected data is analyzed by utilizing SMART-PLS through measurement model and structural equation modelling. The first section of analysis examines the reliability and validity of constructs through Cronbach alpha, Composite reliability and Average variance extract.

3. Results

The current section of the study demonstrates the results. The values for alpha and composite reliability must remain higher than 0.7 and values for AVE must remain higher than 0.5 to satisfy the construct reliability (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). Table 1 below expresses the reliability test through measurement model using the PLS-Algorithm.

**Table 1. Reliability and Validity**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>0.846</td>
<td>0.896</td>
<td>0.685</td>
</tr>
<tr>
<td>Com</td>
<td>0.902</td>
<td>0.931</td>
<td>0.772</td>
</tr>
<tr>
<td>EEE</td>
<td>0.837</td>
<td>0.880</td>
<td>0.522</td>
</tr>
<tr>
<td>SE</td>
<td>0.901</td>
<td>0.931</td>
<td>0.702</td>
</tr>
</tbody>
</table>

The above table 1 demonstrated values of Cronbach Alpha, Composite Reliability and Average Variance Extract (AVE), the values are found to be statistically significant under measurement model and considered as reliable scale to determine the relationship in SEM.
3.1 Discriminant validity

The current section examines the discriminant validity and results in table satisfy correlation of constructs.

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>BP</th>
<th>Com</th>
<th>EEE</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Com</td>
<td>0.448</td>
<td>0.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEE</td>
<td>0.568</td>
<td>0.521</td>
<td>0.723</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.526</td>
<td>0.484</td>
<td>0.743</td>
<td>0.838</td>
</tr>
</tbody>
</table>

3.2 Measurement model

Figure 2 below shows the measurement model.

3.3 Structural Equation Model (SEM)

The second phase of the analysis investigate the relationship between constructs by testing hypotheses directly and the moderation effect of self-efficacy between independent and dependent variables.

Table 3. Hypotheses testing: Direct Relationship

|        | Original Sample (O) | T Statistics (|O/STDEV|) | P Values |
|--------|---------------------|----------------|---------|
| Com -> BP | 0.183               | 2.746           | 0.006   |
| EEE -> BP | 0.329               | 3.875           | 0.000   |
| SE -> BP  | 0.193               | 2.029           | 0.043   |

The above stated table 3 demonstrated direct hypotheses relation between effective entrepreneurial education, competitiveness and business performance; the results of the study found that both direct hypotheses H1 and H2 were statistically significant on the basis of the t-value and p-value that were found to be 3.875 and 0.000 respectively. For H1 and H2, the t-value and p value were observed as 2.746 and 0.006 respectively, therefore, both H1 and H2 were accepted on statistical grounds.
3.4 Moderating effect

The current section of this study examines the moderation effect of self-efficacy between independent and dependent variables of the study.

<table>
<thead>
<tr>
<th>Table 4. Moderating Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Com -&gt; BP</td>
</tr>
<tr>
<td>Original Sample (O)</td>
</tr>
<tr>
<td>EEE -&gt; BP</td>
</tr>
<tr>
<td>0.303</td>
</tr>
<tr>
<td>Moderating Effect 1 -&gt; BP</td>
</tr>
<tr>
<td>-0.108</td>
</tr>
<tr>
<td>Moderating Effect 2 -&gt; BP</td>
</tr>
<tr>
<td>-0.020</td>
</tr>
<tr>
<td>SE -&gt; BP</td>
</tr>
<tr>
<td>0.102</td>
</tr>
</tbody>
</table>

The above demonstrated table shows the results of moderating effect of self-efficacy as presented in H3 and H4. The moderating effect of self-efficacy between EEE and BP were found to be insignificant on the base of t-value and p-value that observed as 1.785 and 0.075 respectively, therefore H3 was rejected on statistical grounds as it was found to be insignificant. The moderating effect of self-efficacy was found to be insignificant between competitiveness and business performance based on t-value and p values observed as 0.293 and 0.770 respectively. Therefore, H3 and H4 found to be insignificant statistically.

4. Discussion

This research sought to examine the impact of entrepreneurial education and competitiveness on business performance of Indonesian SMEs. The research employed 4 hypotheses, two of which were direct and two indirect hypotheses. The direct hypothesis sought to explain how entrepreneurial education and competitiveness influenced business performance of Indonesian SMEs and the indirect hypothesis sought to explain the relationship between self-efficacy, entrepreneurship education and business performance, self-efficacy, competitiveness and business performance. The direct hypotheses were accepted, whereas the indirect hypotheses were rejected.

The first hypothesis was that ‘Effective Entrepreneurial Education Significantly Influences the Business Performance among Indonesian Entrepreneurs’. This hypothesis was accepted. This explains that in order to improve the performance of businesses and entrepreneurs in Indonesia, entrepreneurship education should be encouraged. This research finding corroborates with the findings of previous researchers (Konst & Kairisto-Mertanen, 2019; Pascu, Simo & Vernica, 2019). The second hypothesis was ‘Competitiveness significantly Influences Business Performance among Indonesian Entrepreneurs’ and this hypothesis was also accepted. This finding also corroborates with the findings of previous researchers (Akoul, Lotfi & Radid, 2020).

The third and fourth hypothesis were ‘Self-Efficacy moderates the relationship between Entrepreneurial Education and Business Performance among Indonesian Entrepreneurs’ and ‘Self-Efficacy moderates the relationship between Competitiveness and Business Performance among Indonesian Entrepreneurs’ respectively. These two hypotheses were however rejected on statistical ground. This finding of the current research is in disagreement with previous research findings (Vitulyova, 2020; Falanga, Sagone, De Caroli & Maugeri, 2020). The researchers therefore recommend that future researchers consider the same variables in future research in order to clear the disagreement.
5. Conclusion

The study contributed to the body of knowledge by investigating the empirical examination between entrepreneurial education, competitiveness and business performance with moderating role of self-efficacy. The study was conducted on entrepreneurial businesses of Indonesian in the city of Jakarta; the data was analyzed through PLS by utilizing measurement model and SEM.

The results of the study found that all direct hypotheses H1 and H2 found to be statistically significant, whereas moderating role of self-efficacy was not observed between both independent variables and dependent variable. The study suggests to business owners to introduce entrepreneurial activities through enriching knowledge, skills, and abilities of employees and to become competitive to enhance the performance of businesses

References:


